

PhD position: Atlantic Puffin Social Interactions

Background – Atlantic puffins are highly colonial seabirds that constantly interact with conspecifics. Social interactions in colonial species are often mediated by vocalizations with high-information content such that individual recognition is possible. Penguins for example communicate using a two-voice system that produces rich harmonics, allowing easy parent-offspring contact. Atlantic puffins do not regularly vocalize outside their burrows precluding the use of acoustic communication for conspecific interactions. Our laboratory is exploring individual recognition in this species by analyzing multispectral images of adult puffins. What we currently lack is knowledge regarding the extent to which puffins socialize.

Project description – I am recruiting a PhD student to join the Visual Ecology @ MUN lab to study social interactions in Atlantic puffins. By using traditional colour banding methods and attaching proximity loggers to adult puffins, the student will answer questions such as: How much time do mates spend together on land? How many individuals do they regularly interact with? Are these interactions maintained on the water? How far away from their nests do they visit? There will be much freedom for the student to develop his or her own research ideas. The research will be conducted in the Witless Bay Reserve, home to the second largest colony of Atlantic puffins in the world. The student will collaborate with other lab members with complementary questions in visual communication.

CABE @ MUN – The student will be enrolled in the Cognitive and Behavioural Ecology program at Memorial University of Newfoundland. Advisors in this program are drawn from the Departments of Psychology, Biology, Ocean Sciences, the Environmental Science Division (Grenfell) and Marine Institute. Adjunct Professors from Environment Canada, Fisheries and Oceans Canada, the Newfoundland and Labrador Wildlife and Forestry Divisions and Parks Canada also contribute to student supervision and teaching. Memorial University of Newfoundland hosts 3800 graduate students across more than 100 programs. The St. John's campus is in the province's capital city where a 10-minute bike ride can take you to historic fishing villages, breathtaking ocean views, or to the heart of downtown.

Start date – May 2021

Application deadline – November 15th 2020

Eligibility – For full funding (4 years at ~21,500 CAD/year), applicants must have a minimum 75% grade in their last 20 credit (equivalent to B+).

To apply – Please send a statement of interest describing your career goals and how this position would help you achieve them, a CV, and transcripts (unofficial) to pbitton@mun.ca. Furthermore, provide a first-authored publication reprint, manuscript in preparation, or a chapter of your MSc research for evaluation. Only applicants short-listed for interviews will be contacted.

The successful applicant should have completed an MSc by the start date, and has strong work ethics. Previous fieldwork with birds and knowledge of electronics are assets but not required. Our lab highly values diversity of ideas and cultures. We are an inclusive group that respects individual differences and provides an equitable work environment. Because of current travel restrictions and difficulties for international students with obtaining the required visas, Canadian citizens will be given priority.

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